

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

SMART MOBILE TECHNOLOGIES LLC,

Plaintiff,

v.

APPLE INC.

Defendant.

Case No. 6:21-cv-00603-ADA

SMART MOBILE TECHNOLOGIES LLC,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD., and
SAMSUNG ELECTRONICS AMERICA,
INC.,

Defendants.

Case No. 6:21-cv-00701-ADA

**DEFENDANTS' OPENING CLAIM CONSTRUCTION BRIEF
REGARDING THE '501 PATENT FAMILY**

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I. INTRODUCTION

Smart Mobile Technologies LLC (“SMT”) asserts more than 160 claims of 14 patents against Defendants Apple Inc. (“Apple”) and Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc. (collectively “Samsung”). This brief addresses the following six related patents: 8,442,501, 8,472,936, 8,472,937, 8,761,739, 9,049,119, and 9,756,168. Defendants have identified only key terms requiring construction. For most terms, Defendants’ constructions reflect the plain and ordinary meaning to a POSITA as informed by the intrinsic evidence. Where Defendants’ constructions depart from the ordinary meaning, it is only because the term (1) is used in the intrinsic record in a way inconsistent with its ordinary meaning, or (2) is indefinite.

SMT’s proposed constructions, however, are untethered to the intrinsic record and largely ignore the language of the claims. SMT’s goal is clear—it wants to expand the scope of the asserted claims from the context of its 1996-2000 aspirational specifications to encompass features and technologies not even imagined by (and certainly not described or enabled by) the inventors, and to rewrite the claims to save them from their drafting mistakes. The Court should reject SMT’s attempt to inject ambiguity and uncertainty into the claim construction process.

II. OVERVIEW OF PATENTS-IN-SUIT

The patents addressed in this brief pertain to a communication system comprising a wireless device and a server. Each patent, at least at one time, claimed priority to an application filed December 16, 1996 naming as inventors Sanjay and Sunil Rao—brothers who were in high school or college at the time—and prosecuted by their father, Raman Rao.

The 1996 Application: The 1996 application (08/764,903) was directed to an “intelligent keyboard” system that “leverages the tremendous power of both the Intranet and Internet” to “execute complex tasks” normally suited for more powerful machines. Ex. 16 at SM0000123. The application described the alleged invention in aspirational tones, claiming that the

“Intellikeyboard” could essentially do anything. It could allegedly scan documents, read CD-ROMs, provide phone calls, display graphics, and perform speech recognition. *Id.* at SM0000137-143. The 1996 application struggled in prosecution due to the patentee’s unfamiliarity with the patenting process, shown for example, by seeking claims describing the Intellikeyboard in short paragraphs in violation of the Patent Office’s requirements for the format of claims. *See* Ex. 16 at SM0000081, 144. Tellingly, the Examiner objected to the specification, recognizing that it described the alleged invention in general terms but otherwise provided no technical information about how it was supposed to work. Ex. 16 at SM0000083. The application later was abandoned.

The 1999 Application: The Raos then filed a continuation-in-part (“CIP”) application (09/281,739) on June 4, 1999, this time aided by counsel. Ex. 17 at SM000359. It closely followed the 1996 application, except it added some additional figures and descriptions of those figures. Again, however, these descriptions were very high level and devoid of technical detail. The 1999 application featured one claim directed to an “intelligent keyboard system.” *Id.* at SM0000400. The application was allowed without any office actions. *Id.* at SM0000300-3.

The June 2000 Application: The Raos filed another CIP (09/591,381) on June 9, 2000 that included an overhauled specification. The patents addressed in this brief appear to be based on this specification. However, like the 1996 and 1999 applications, the 6/2000 application also described the alleged invention in an aspirational manner (even referring to a generic “future wireless device” (FIG. 1)) with little disclosure of how to achieve the alleged inventions. According to its summary, this new application pertained to a “central server for storing communication protocols and control protocols.” Ex. 20 at SM0001254. “The communication protocols configure the system for communication and the control protocols configure the system as one of an arbitrary number of intelligent appliance controllers.” *Id.*

The application further disclosed that the mobile device is “dynamically software reconfigurable for the various environments” such as public networks in different countries, in the office, or in the home. *Id.* at SM0001255. Because these different environments may use different frequencies, the application states that the mobile device can be “dynamically tuned for transmit and receive functions suitable for each environment.” *Id.*

The application does not explain in any useful detail how mobile device reconfiguration is accomplished, but it consistently describes a server as essential to this process. For example, when a device seeks to reconfigure itself “as a cell phone because it is not in the home environment” it can “send a request” to the server. *Id.* at SM0001257. The server “can be used to keep the various ‘functional instruction sets’ (FIS) and software (S/W)” for use by the CT/MD. The FIS and software “resident on” the server “serve to provide the primary repository/exchange to deliver various mode reconfiguration requests to the CT/MD.” *Id.*; *see also id.* at SM0001260 (describing that “Server C” sends functional instruction sets to the CT).

The application also ambiguously describes the different environments as “modes.” It specifically mentions a “public carrier” (Figure 2A), a “local office loop” (Figure 2B), and a “home loop” (Figure 2C). It confusingly describes that these modes can be organized as a hierarchy, while at the same time the hierarchy can be modified on the fly such that different environments can correspond to the primary mode at different times.

III. LEVEL OF ORDINARY SKILL

A POSITA would have had a bachelor’s degree in electrical engineering, or equivalent training, and approximately two years’ experience working in the field of networking and wireless devices. Lack of work experience can be remedied by additional education, and vice versa.

IV. CLAIM CONSTRUCTION ANALYSIS

A. “server” (653 (4, 15, 27, 28); 946 (1, 4, 15, 17, 27, 28, 29, 30); 075 (1); 168 (2, 4, 19, 20, 28, 29, 34); 501 (1, 13, 16); 936 (1, 9, 11, 19); 937 (1, 13, 16); 739 (1, 13, 16); 863 (1, 4, 5, 6, 11, 14, 19, 24); 119 (20); 083 (6, 8); 943 (6))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Plain and ordinary meaning	A computing device or program or collection of computing devices or programs that provides resources, data, services, or programs to other computing devices or programs over a network, or that enables access to a network or network resources.

The word “server” generally refers to a computer on a network that “serves” client devices. Ex. 1 (“Bims Decl.”) ¶¶ 24-25.¹ Servers are a backbone of the modern Internet, as they can store website data and “serve” it to computers or mobile devices upon request. *Id.* POSITAs are well familiar with what “servers” are, and the Court should decline SMT’s proposal to adopt an overly broad construction, which is unsupported by either the patents or extrinsic evidence.

Adopting a specialized construction is particularly inappropriate here given that “server” defies a one-size-fits-all definition. A survey of technical dictionaries reveals some consistent properties of servers, but their precise definitions vary. Some describe a server as a shared computer that stores and provides files. For example, FREEDMAN’S THE COMPUTER DESKTOP ENCYCLOPEDIA defines server as a “computer in a network shared by multiple users.” Ex. 34 at 768; *see also* Ex. 35 (FREEDMAN’S THE COMPUTER GLOSSARY 355) (same); Ex. 36 (DICTIONARY OF COMPUTER WORDS 255) (“a computer that *stores files and provides them* to individual workstations, or clients”); Ex. 37 (WEBSTER’S NEW WORLD DICTIONARY OF MEDIA 544) (“a central machine that feeds and collects data to and from several or many work stations linked by a

¹ “[W]ords of a claim ‘are generally given their ordinary and customary meaning,’” which “is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005).

computer network”). On the other hand, other dictionaries recite definitions reflecting that servers are powerful. *See* Ex. 38 (NEWTON’S TELECOM DICTIONARY 640) (servers are the “fastest and brawniest PC around.”).

SMT’s proposal is so broad that it lacks reasonable boundaries. First, neither the claims nor the specification refer to a server as a “program.” The specification expressly distinguishes servers from functional instruction sets and software that are not servers themselves, but instead “reside[]” on servers. *See* ’501 patent, 7:28-29. SMT’s attempt to construe this term so it can accuse mere software (whether or not part of an actual server) should be rejected.

Second, SMT’s attempt to rewrite “server” to encompass multiple servers is improper. *See Traxcell Techs., LLC v. Nokia Sols. and Networks Oy*, 15 F.4th 1136, 1143 (Fed. Cir. 2021) (construing “computer” to mean a single computer that could perform each recited function, rejecting argument that the claimed “computer” could encompass capabilities spread among multiple computers). By interpreting “server” as either a single “computing device or program” or a “collection” thereof, SMT argues that the claimed “server” can be a collection of servers. But, the specification consistently distinguishes “server” from multiple servers. *See* ’501 patent, 3:20-24 (referencing “a central server C working alone or in tandem with other servers”), 7:3-6 (same). Likewise, when claiming a “server,” the claims consistently follow up by reciting functionality that “the” server (i.e., a specific server as opposed to multiple servers) must be configured to have. *See e.g., id.*, claim 1; *see also Traxcell*, 15 F.4th at 1144 (stating “it would defy the concept of antecedent basis—for the claims to recite ‘the computer’ . . . being ‘further’ programmed to do a second set of tasks if a different computer were to do those tasks instead”).

Finally, SMT’s proposal that a server “provides resources, data, services, or programs to other computing devices or programs over a network” or “enables access to a network or network

resources” fails to place any reasonable limitations on the term. Any two devices in communication with each other—such as phones exchanging text messages or client PCs exchanging e-mails—would “provide[] . . . data” to one another under SMT’s proposal. Bims Decl. ¶¶ 24-25. But, a POSITA would not consider a phone that sends a text message or client PC that sends an email to be a “server.” *Id.* Nor would a POSITA consider a wireless access point or router that “enables” a device to connect to a network to be a “server.” *Id.*

B. “functional instruction” (501 (1); 936 (1, 13, 20); 937 (1); 739 (1); 119 (20))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	Software that, when executed by a processor, provides a function.

“Functional instructions” is not a term of art, Bims Decl. ¶¶ 26-28, and there is no reasonable certainty about what it means in the context of the Asserted Patents. When discussing “functional instructions,” the patents merely describe that they are stored on a server (*see* ’501 patent, 6:59-61) or provide vague examples of what they can do when included in “functional instruction sets”—anything from configuring mobile devices (*see id.*, 5:5-13), to allowing a server to operate with a mobile device (*see id.*, 5:41-46), to controlling intelligent devices (*see id.*, 5:31-34). But, the patents never explain what these “functional instructions” *are*, and what little detail they do include only adds confusion. First, the claims and specification distinguish “functional instructions” from “software.” *See, e.g., Nystrom v. TREX Co.*, 424 F.3d 1136, 1143 (Fed. Cir. 2005) (“When different words or phrases are used in separate claims, a difference in meaning is presumed.”); *CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000). For example, the ’501, ’936, ’937, ’739, and ’119 patents all claim “functional instructions” for a wireless or mobile device, whereas the ’168 patent claims “software” for a wireless device. The specification likewise recites “functional instructions” and “software” as

distinct terms. *See, e.g.*, ’501 patent, 3:67-59 (describing that a server can store both functional instruction sets *and* software for use by a mobile device); *see also id.*, 7:27-32. But at the same time, the specification also appears to describe the terms as related. For example, it refers to “function instruction *software*,” using “function[al] instruction” to modify “software” as though they are a particular *type* of software. *See id.*, 5:3-4, 8:38-39. But, which type(s) of software are “functional instructions” and which are not? The patents provide no guidance, and there is no reasonable certainty what “functional instructions” are in the context of the claims.

SMT’s proposed construction is wrong for several reasons. First, it is inconsistent with the Asserted Patents’ distinction between “functional instructions” and software. While SMT nominally proposes that “functional instructions” are a type of software that “provides a function,” it is unclear what SMT means by that or how it would be applied (e.g., whether SMT proposes that some software provides a “function” while other software does not). In addition, the specification describes that “functional instructions” are not limited to being executed on a “processor” but also can be processed on “controller” electronics. *See* ’501 patent, 5:62-63.

C. “functional instructions [including instructions] for use in providing a plurality of functions to the [wireless/mobile] device . . .” (501 (1); 936 (1); 937 (1); 739 (1); 119 (20))

Defendants’ Proposed Construction	SMT’s Proposed Construction
“functional instructions” is indefinite (<i>see</i> Section IV.B). The claimed “functions” are types of mobile/wireless devices. (<i>see</i> Section IV.H). Otherwise, plain and ordinary meaning.	software executable by the handheld communication device that enables a plurality of capabilities

As an initial matter, and for the same reasons discussed above, this claim term is indefinite because it includes “functional instructions.” *See supra* Section IV.B. To the extent the Court concludes “functional instructions” is not indefinite, Defendants’ proposal should be adopted

because unlike SMT’s proposed construction, it (1) gives meaning to each and every word in the claim language; (2) is consistent with the parties’ respective other proposed constructions; and (3) does not improperly narrow the claims to only “handheld” communication devices.

First, Defendants’ proposed construction of plain and ordinary meaning gives effect to the phrase “for use in providing,” as recited in the claim term. SMT’s proposed construction seeks to eviscerate that claim language by rewriting “providing” to mean “enable.” “Providing” is a common word with a well-known meaning, and nothing in the specification suggests that “providing” should deviate from its plain and ordinary meaning.

SMT’s replacement of “providing” with “enables” has no support and is inconsistent with the claim language. The patentee knew how to claim “enabl[ing]” when it wanted, as other portions of each claim at issue separately recite “enabl[ing].” *See* ’501 patent, 9:36-39; ’936 patent, 9:35-39; ’937 patent, 9:37-39; ’739 patent, 9:44-47; ’119 patent, 10:61-64. Here, the patentee instead chose to claim “providing,” and SMT’s belated attempt to rewrite the claim language fails to recognize that distinction in word choice. *See, e.g., CAE*, 224 F.3d at 1317.

Second, Defendants’ proposed construction is consistent with other disputed claim terms, by incorporating Defendants’ position from the “conversion”/“configurable” claim term. *See infra* Section IV.H. SMT’s proposal, on the other hand, is littered with inconsistencies when compared against its other claim construction positions. For example, this claim term recites “functional instructions,” but SMT does not incorporate or make any mention of its proposal for “functional instruction.”² SMT’s proposal for “functional instruction” includes a processor (*see supra* Section IV.B), but SMT’s proposal for this claim term does not. SMT’s proposal for “functional

² This is in contrast to other disputed claim terms, where SMT incorporates its proposed constructions from shorter claim terms into longer disputed claim terms. *See infra* Section IV.H.

instruction” also requires a functional instruction to “provide[] a function” (*see id.*), but here “functional instruction” appears to be merely “software,” with no mention of “function.”

Next and critically, SMT’s proposed construction is at odds with *nearly identical claim language* recited in the disputed “conversion”/“configurable” claim term, where SMT merely proposes plain and ordinary meaning for “provide” and (unlike for this term) does not seek to interpret it as “enable.” *See infra* Section IV.H.

Finally, SMT attempts to import a requirement into the claims that the claimed wireless/mobile device must be “handheld.” But, this is contrary to the specification, which teaches that the alleged invention can be implemented in *any* wireless device. *See* ’501 patent, Fig. 1; 3:34-37 (alleged invention can be implemented, e.g., in a blank box future wireless device).

D. “switching between one or more networks . . .” (501 (1); 936 (1); 937 (1); 739 (1); 119 (20))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	Plain meaning

Because a POSITA would not be reasonably certain what switching between “one” network means, these claims are indefinite. Bims Decl. ¶¶ 29-32. Switching between *two* or more networks makes some sense, as a device could theoretically communicate on one network and then “switch” to communicating on a second network. Prior art devices could commonly do that. However, it is unclear what it could possibly mean to switch “between” only *one* network.

The claim language sheds no light on this phrase. Each claim states that the “one or more” networks includes a particular type of network, such as a “public network” and/or “wireless carrier network” (’501, ’936, ’937, and ’739 patents); or a “network operating using a FCC approved public or carrier frequency” (’119 patent). But, these generic descriptions of the particular type of

network do not help. It is no more clear what it means to switch between “one” public network than what it means to switch between “one” of any other type of network.

Nor does the specification clarify. It does generally describe communicating on various networks (e.g., public wireless carrier, local office, or home networks). ’501 patent, 3:38-5:23. It also refers to “one or more” networks. *See id.*, 3:12-14 (describing that a mobile device “can be a part . . . one or more wireless networks obviating the need for multiple devices.”). None of this, however, sheds light on what it could mean to “switch” between only “one” network.

To the extent SMT argues this term simply means that the device switches between multiple (i.e., “two or more”) networks, that argument is contrary to law. Because the Court cannot disregard or rewrite the “one or more” language to mean “two or more,” the claims are indefinite. *See, e.g., Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1373 (Fed. Cir. 2004) (holding it impermissible to rewrite a claim requiring heating dough “to” 400° F to require heating dough “at” 400° F, even though the claim as written was nonsensical).

E. “the server serves as a primary repository or exchange to deliver various functions to the wireless device” (501 (1); 739 (1))

Defendants’ Proposed Construction	SMT’s Proposed Construction
the server stores all functional instruction sets belonging to the wireless device that it uses to respond to mode reconfiguration requests from the wireless device by downloading and uploading the functional instruction sets and software to and from the wireless device ³	The server stores software that may be transmitted to the handheld communication device to enable the device to have various capabilities

Defendants’ construction reflects the ordinary meaning of the term in the context of the intrinsic record, and is thus correct. SMT’s construction simply reads most words out of the claim in yet another attempt to minimize the server’s role in the claimed systems, and should be rejected.

³ As noted herein, “functional instructions” is indefinite. *See supra* Section IV.B. To the extent the Court holds that it is not indefinite and construes it to have a specific meaning, that meaning would apply to Defendants’ proposed construction.

As discussed in reference to other disputed terms herein, claims 2 and 4 of the '168 patent recite “a remote server configured to store wireless device software” and a “server configured to store software.” '168 patent, 9:61-66, 10:43. Accordingly, the more specific language in this disputed term, the “server serves as a primary repository or exchange,” presumably requires more than merely storing software. *See Nystrom*, 424 F.3d at 1143; *CAE*, 224 F.3d at 1317.

Defendants' construction reflects the ordinary meaning for the server to “serve[] as a primary repository or exchange.” For example, extrinsic evidence defines “repository” as “[a] collection of all software-related artifacts (e.g., the software engineering environment) belonging to a system” (Ex. 39, IEEE STANDARD FOR SOFTWARE MAINTENANCE, IEEE Std. 1219-1993 4), and “software repository” as “[a] software library providing permanent, archival storage for software and related documentation” (Ex. 40, IEEE STANDARD GLOSSARY OF SOFTWARE ENGINEERING TERMINOLOGY, IEEE Std. 610.12-1990 68). This confirms the server stores *all* functional instruction sets belonging to the wireless device, not just software. Although the claimed “exchange” has no specialized meaning, a POSITA would recognize that “exchanging” generally requires giving one thing and receiving another.

The patents' specification further confirms that the claims use “primary repository” and “exchange” in their ordinary sense. For example, the specification states:

When CT/MD 202 wishes to use the services of Server C 214, the Server C 214 works to efficiently deliver the content or perform functions requested by CT/MD 202.

CT/MD 202 utilizes the profiles and other user specific information 218 stored on the Server C 214.

Server C 214 is used to keep the various “functional instruction set” and software 218 for use by CT/MD 202. This FIS and software 218 resident on Server C 214 will serve as the primary repository/exchange to deliver various mode reconfiguration requests to the CT/MD 202. For example, the CT/MD 202 may send a request to the Server C 214 to be configured as a cell phone because it is not in the home environment 260.

'501 patent, 7:22-34⁴; *see also id.*, 3:52-64. This passage confirms Defendants' construction. All of the wireless device's "FIS and software"⁵ *resides* on the server, allowing the server to deliver various modes to the device. For example, a device currently configured to operate in the "public carrier wireless loop" ("CT") that "wishes to be in the primary mode of the local wireless office loop," changes modes by sending a "request for reconfiguration" to a server. *Id.*, 5:53-59. The server then "looks up" the FIS and transmits it to the CT, which "processes" and "loads" the FIS into memory so the CT is "converted to the primary local office mode." *Id.*, 5:60-67.

Similarly, the specification's discussion of the "exchange" aspect of the server is consistent with the ordinary meaning of "exchange." For example, it states that the CT/MD "switches itself for optimal performance" by both *uploading* FIS to the server and *downloading* FIS when needed. '501 patent, 8:9-12 (stating that the CT/MD "switches itself for optimal performance" by "downloading/uploading FIS" "in tandem with" the server).

SMT's construction strips "primary repository or exchange" from the claim entirely and, therefore, cannot be correct. Indeed, SMT proposes the same generic construction for this term as it proposes for other terms that do not even recite a "primary repository or exchange." *See infra* Section IV.F (proposing the same constructions for "the server is configured to send to the wireless device a plurality of functions" ('936 patent claim 1) and "the server provides a plurality of functions for control of the mobile device" ('937 patent claim 1)). The Asserted Patents' file histories are also instructive here, where the applicants filed four applications—three of which issued as the '501, '936, and '937 asserted patents, on the same day (09/13/2013)—with an

⁴ Unless expressly stated, all emphases in quotes are added by Defendants.

⁵ The claims in which the disputed term appears refers to "functional instructions," not software. Defendants' construction therefore references only the functional instruction sets (FIS), to the extent "functional instructions" is not held indefinite.

identical or nearly identical single independent claim. The examiner issued double patenting rejections based on the other co-pending identical, or nearly identical claims, and the applicant proceeded to amend the “server” claim limitation of the applications that issued as the ’501, ’936, and ’937 patents to overcome those rejections. Ex. 21 ’936 FH at SM0002033, SM0002036; Ex. 23 ’501 FH at SM0001473, SM0001476; Ex. 24 ’937 FH at SM0002196, SM0002199. Thus, the inventors told the Patent Office that the amended claim language across the patents (“serves as a primary repository or exchange” (’501, ’739), “server is configured to send to the wireless device a plurality of functions” (’936 claim 1), “server provides a plurality of functions for control of the mobile device” (’937 patent claim 1)) was different—but SMT now wants to change course and say the claim language means the same thing. SMT should be held to the issued claim language and statements made during prosecution, as required by the basic rules of claim construction.

SMT’s construction is also wrong because it only affirmatively requires that the server “stores software”—the rest is either (1) merely permissive (i.e., what *may* be done with that software) or (2) redundant of software itself (i.e., enabling various capabilities). SMT’s improper attempt to read the specific language of the disputed term out of the claim should be rejected.

F. “the server serves . . . to deliver various functions to the wireless device” (501 (1); 739 (1)) / “the server is configured to send to the wireless device a plurality of functions” (936 (1)) / “the server provides a plurality of functions for control of the mobile device” (937 (1))

Defendants’ Proposed Construction	SMT’s Proposed Construction
The claimed “functions” are types of mobile/wireless devices. (<i>see</i> Section IV.H). Otherwise, plain and ordinary meaning. ⁶	the server is configured to transmit software or application data to the handheld communication device that enables a plurality of capabilities

⁶ SMT proposed these terms. It is unclear whether SMT proposes the term “the server serves as a primary repository or exchange to deliver various functions to the wireless device,” addressed above, should be interpreted differently here. However, Defendants’ propose the construction identified above for that term.

As an initial matter, this claim term encompasses several other disputed claim terms and issues discussed in greater detail in other sections of this brief. *See supra* Sections IV.A (“server”), IV.E (“primary repository or exchange”), IV.C (alleged limitation to handheld devices); *see infra* Section IV.H (“functions”). For the reasons set forth in those sections, the Court should adopt Defendants’ proposed constructions and apply those constructions to this claim term.

Setting aside the overlapping issues and disputes, Defendants’ proposal should be adopted because it (1) gives meaning to each and every word in the claim language and (2) is consistent with Defendants’ other proposed constructions. SMT’s proposed construction fails to do either.

The relevant claim language calls for a server that (1) “serves . . . to deliver various functions to the wireless device”; (2) “is configured to send to the wireless device a plurality of functions”; or (3) “provides a plurality of functions for control of the mobile device.” Defendants’ proposal respects the differences in claim language because it preserves the actual verb (“serves . . . to deliver,” is “configured to send,” or “provides”) to describe what the claimed server does. These verbs are well known to a lay person, and will be readily understood by a jury at trial. In contrast, SMT rewrites the differences in the claim language. According to SMT, a server that “serves . . . to deliver,” is “configured to send,” or “provides” a plurality of functions are all a server that “is configured to transmit.” But, if the patentee wanted to simply claim a server that “is configured to transmit,” it knew how to do so. *See* ’119 patent, 10:52-54 (recites “wherein the mobile device *is configured to transmit* and receive voice on the first wireless network . . .”).

SMT’s proposal for this term is also inconsistent with its other proposals. Notably, SMT has proposed elsewhere that the claimed “functions” should be interpreted as “capabilities.” *See* Sections IV.H, IV.I. Yet here, it appears that SMT proposes construing “functions” as “software

or application data^[7] . . . that enables a plurality of capabilities.” *Compare, e.g.*, ’936 patent, claim 1 (“the server is configured to send to the wireless device a plurality of functions”), with SMT’s proposed construction (“the server is configured to transmit software or application data to the handheld communication device that enables a plurality of capabilities”) (color added to show how claim language corresponds with SMT’s construction). Unlike SMT’s construction, which conflicts with SMT’s position regarding “functions” in other claim terms, Defendants’ proposal provides for a consistent interpretation of “functions” throughout.

G. “dynamic / dynamically” (434 (1); 501 (1, 2); 936 (1); 937 (2); 739 (1, 2); 863 (4); 168 (2, 4))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite.	When and as needed, responsive to variable conditions and without the need for user intervention.

The claims at issue recite a mobile/wireless device or server that “dynamically” performs various actions, such as dynamically converting from a first to a second function; dynamically switching between networks; or dynamically switching frequencies. *See, e.g.*, ’501 patent, claims 1, 2; ’168 patent, claims 2, 4. While the claims and specification repeat the label that these actions occur “dynamically,” they provide no guidance for what this actually means. A POSITA would have no way to assess whether a particular action is “dynamic” or not in the context of these claims. Bims Decl. ¶¶ 33-37. Accordingly, they are indefinite. *See, e.g., GE Lighting Sols., LLC v. Lights of Am., Inc.*, 663 Fed. Appx. 938, 941 (Fed. Cir. 2016) (holding claim requirement that a thermally conductive core be “elongated” indefinite because POSITA “has no objective means to determine which cores are ‘elongated’ and which are not.”).

Neither the plain and ordinary meaning of “dynamic” nor the specification resolves this

⁷ There is also no support in the intrinsic evidence for the inclusion of “application data.”

ambiguity in claim scope. Dictionaries define “dynamic” in various ways but, most commonly, as events that are “constantly changing” or “energetic” or “forceful.” *See* Ex. 27 (NEWTON’S TELECOM DICT., 11th Ed. 207 (“Events are constantly changing.”)); Ex. 28 (THE CONCISE OXFORD DICT. OF CURRENT ENGLISH 424 (“energetic; active; potent.”)); Ex. 29 (THE AM. HERITAGE DICT. OF THE ENGLISH LANGUAGE 574 (“Marked by intensity and vigor; forceful.”)).⁸ Neither description applies or is useful here. The actions the claims and specification describe as “dynamic” are not constantly changing; they are triggered by specific events. Some claims, for example, recite dynamically “converting” the device from a first to a second function. *See, e.g.*, ’501 patent, claim 1. But, the specification does not describe this conversion as constantly occurring; it occurs when the device needs to convert from one function to another (e.g., to a cordless phone if the device is in a home environment, or to a cell phone if it is not). *See id.*, 3:63-64, 5:5-9. Nor does the specification describe the conversion as “energetic” or “forceful.” Finally, SMT’s construction is unsupported. The specification does not describe “dynamic” conversion (or other actions the claims recite as “dynamic”) as “without the need for user intervention.”

⁸ A construction of “dynamic” as “constantly changing” or “energetic” or “forceful” would itself be indefinite, as there would be no reasonable certainty about what those labels mean in the context of the claims at issue, either.

H. “wherein the server enables dynamic conversion of the wireless device from a first function to a second function to provide a plurality of functions at the wireless device” (501 (1); 739 (1)) / “wherein the wireless device is dynamically configurable from a first function to a second function to enable a plurality of functions at the wireless device” (936 (1)) / “wherein the server provides a plurality of functions for control of the mobile device and enables conversion of the mobile device from as first function to a second function to provide a plurality of functions at the mobile device” (937 (1)) / “wherein the server enables conversion of the mobile device from a first function to a second function by providing a plurality of functions to the mobile device” (119 (20))⁹

Defendants’ Proposed Construction	SMT’s Proposed Construction
<p>“conversion of the mobile/wireless device from a/as first function to a second function to/by provide/providing a plurality of functions at/to the mobile/wireless device”: transformation from a first type of mobile/wireless device with a first set of capabilities to a second type of mobile/wireless device with a different, second set of capabilities to/by provide/providing a plurality of types of mobile/wireless devices at/to the mobile/wireless device</p> <p>“configurable from a first function to a second function to enable a plurality of functions at the wireless device”: transformable from a first type of wireless device with a first set of capabilities to a second type of wireless device with a different, second set of capabilities to enable a plurality of types of wireless devices at the wireless device</p>	<p>Plain meaning, with the exception of “server,” “dynamic/dynamically,” and “wireless device,” “mobile device,” and “first function” / “second function” / “plurality of functions at (to) the wireless device,” which should be construed as proposed by Smart Mobile.</p>

The parties’ dispute largely centers on what it means to “convert” or “configure” from a first “function” to a second “function.” SMT proposes it means converting or configuring “capabilities.” *See infra* Section IV.I (SMT replacing “function” with “capability”).¹⁰ Defendants, propose that in this context, “function” refers to a “type” of wireless/mobile device. The Court should adopt Defendants’ construction because it is rooted in the intrinsic evidence and goes to the heart of SMT’s alleged invention. SMT’s construction should be rejected because it seeks to

⁹ To the extent “dynamic[ally]” is not indefinite, its meaning should be applied in the context of these claim phrases that recite “dynamic[ally].”

¹⁰ This “conversion”/“configurable” claim term encompasses several shorter claim terms in dispute, as noted, for example by SMT’s proposed constructions. Defendants have addressed the shorter claim terms in separate sections. *See* Sections IV.A, IV.C, IV.E, IV.I.

interpret the word “function” in a vacuum and improperly broadens the claim term.

Critically, the claim language recites “function” in the context of a “conversion” or being “configurable” from a first to second function. The patentee made “repeated and consistent remarks” during prosecution that this requires transforming the device from a first type of device to a second type of device. *See Personalized Media Commc'ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1340 (Fed. Cir. 2020) (“an applicant’s repeated and consistent remarks during prosecution can define a claim term by demonstrating how the inventor understood the invention,” regardless of disavowal). In particular, when faced with prior art rejections during prosecution of a parent patent, the patentee told the Patent Office that the invention is different from the prior art because it “*transform[s] or morph[s] [a device] by software means from one type of communication device to another.*” Ex. 20 at SM0001169. Additionally, the patentee, on several occasions, provided examples of how the alleged invention would transform a device from one type to another:

- “The change in communication and control protocols enables the same physical device to perform *a first function such as a cellular telephone* for voice communication and upon dynamic reconfiguration to *a second communication and control function such as an IP based telephone or an IP based intelligent applicant controller.*” Ex. 20 at SM0001144.
- “Whereas [the present application] Rao et al teach the means for *transforming* the functionality of *the cellular telephone* which has limited processing capability *to a hand held computer* with enhanced computational capabilities.” *Id.* at SM0001144.
- “Whereas Rao et al teach the means for *transforming* the functionality of *the IP based telephone* which has limited processing capability *to an intelligent appliance* with enhanced capabilities” *Id.* at SM0001146.

The patentee’s statements during prosecution come as no surprise, as the specification also reinforces that the alleged invention is transforming a device between different device types. For example, Figure 1 of the ’501 patent shows a “future wireless device” 106 that can “implement the improvements of the present invention,” “requir[ing] no physical changes.” ’501 patent, Fig.

1; 3:27-37. This “future wireless device” is nothing more than an empty box, but that is precisely the aspirational concept contemplated by the patentee, i.e., a physical device, even an unknown, empty box, that can be transformed to operate as different devices as needed. *See also, e.g., id.*, 1:28-42 (motivated to avoid proliferation of devices); 2:50-52 (wireless device can be one of several different device types); 4:43-49 (same); 5:5-30 (same).

Defendants’ construction accounts for this and also makes clear that when converting from one device type to another, the device’s capabilities are changed. That is exactly what the patentee argued during prosecution, when it distinguished a prior art device by arguing that the prior art “device *remains the same with the same original capabilities for communication*,” both before and after the alleged conversion. The patentee stated that a device merely retaining its same capabilities is not the alleged invention; rather, the patentee contemplated a device “to transform itself from one communication protocol to another and from one function to another. As an illustrative example, in the Rao teaching the pager could be configured as a cellular phone.” Ex. 20 at SM0001145. In other words, the patentee itself argued that “conversion” is a transformation that results in different capabilities. This, of course, also makes sense as a practical matter; no “transformation” would be needed if capabilities remained the same.

SMT’s proposal is untethered to the intrinsic record and should be rejected. First, SMT’s proposed construction would broadly encompass merely switching from one *existing* capability on the device to another *existing* capability on the same device. But, simply performing another existing capability on the device is not the purported invention. To the contrary, it is what the patentee expressly distinguished during prosecution. As discussed above, the applicant distinguished the prior art for having a device that “remains the same with the same original capabilities,” and therefore, criticized the claim scope that SMT’s construction now seeks.

Gillespie v. Dywidag Sys. Int'l, 501 F.3d 1285, 1291 (Fed. Cir. 2007) (“The patentee is held to what he declares during the prosecution of his patent.”); *see also* Ex. 20 at SM0001145. Second, merely switching between existing capabilities would not address the key problem the patents allegedly solved—avoiding the proliferation of devices. *See* ’501 patent, 1:19-42. Only by transforming the device from one device type to another device type with different capabilities, as proposed by Defendants’ construction, would the goals of the alleged invention be achieved. Defendants thus respectfully request the Court to adopt their proposed construction.

I. “first function” / “second function” / “plurality of functions at (to) the wireless device” (501 (1); 936 (1); 937 (1); 739 (1); 119 (20))

Defendants’ Proposed Construction	SMT’s Proposed Construction
This term should be construed, if at all, in the context of the larger phrase identified above in Section IV.H to the extent the terms overlap. To the extent the terms do not overlap, the non-overlapping portions do not require construction (i.e., plain and ordinary meaning).	first capability / second capability / plurality of handheld communication device capabilities

These claims terms are entirely encompassed in the broader claim language above in Section IV.H. As discussed above, “function” should be construed as a type of mobile/wireless of device. *See supra* Section IV.H. Furthermore, SMT’s attempts to inject an additional requirement that a “wireless device” must be “handheld” is unwarranted. *See supra* Section IV.C.

J. “application” (501 (17); 739 (17); 168 (2, 4, 5, 19, 22))

Defendants’ Proposed Construction	SMT’s Proposed Construction
’168 (2, 4), ’501 (17), ’739 (17) Plain and ordinary meaning, which is use, role or task	A program or group of programs that enables a user to interact with the device to cause the device to perform a task or set of tasks
’168 (5, 19, 22) Plain and ordinary meaning, which is a software program designed to assist in the performance of a specific task	

The context of the claims and the specification confirm Defendants’ plain and ordinary meaning positions are correct. SMT’s “one-size-fits-all” proposal demonstrates its inexact, hand-

waving approach to claim interpretation and an improper attempt to change the scope of its patents.

The parties primarily dispute the meaning of “application” for ’168 patent claims 2 and 4, and claim 17 of the ’501 and ’739 patents, respectively. Those claims use “application” consistent with only a single plain meaning, which is “use, role or task.” The shared specification also uses “application” consistent with that meaning, stating: “mobile devices (MD) include the ability to reconfigure the MD *for different environments and applications* in cases where it is required that the phone be able to operate *in these* other environments and *applications*” (’168 patent, 1:18-21) and “embodiments were chosen and described in order to best explain the principles of the present invention and *its practical application*” (*id.*, 9:21-23). In these instances, the specification describes the “use” to which the device is put. Similarly, claims 2 and 4 of the ’168 patent refer to the “use, role or task” to which the software or device is put. Claim 2 recites “a remote server configured to store wireless device *software for a plurality of different functions or applications* for use by a plurality of wireless devices,”¹¹ and claim 4 recites “the server is configured to store *software* for a plurality of wireless devices and *for a plurality of applications for the plurality of wireless devices.*”¹² ’168 patent, claims 2, 4. Claim 17 of the ’501 and ’739 patents each also use “application” consistent with a device’s “use, role or task”: for “intelligent device control” and “video”/“audio” tasks. ’501 patent, claim 17; ’739 patent, claim 17.

On the other hand, for the ’168 patent’s claims 5, 19, 22, the applicant introduced claims during prosecution that used “application” consistent with a second plain meaning—a software program designed to assist in the performance of a specific task. For example, claim 5 recites “the

¹¹ Defendants’ proposal is also consistent with the intrinsic record’s use of “function” as addressed elsewhere in the context of that disputed term.

¹² Also, these claims separately recite “software,” thus demonstrating that SMT’s construction that equates software or programs with an “application” is nonsensical in the context of the claims.

device downloads an application,” claim 19 recites “a software application to be downloaded,” and claim 22 recites “download an application for controlling a garage door opener.” In this context, it is clear the claims use “application” to refer to a software program designed to assist in the performance of a specific task, and not the task itself. Defendants’ proposal captures this second plain meaning; SMT’s construction fails to recognize any distinction between how “application” is recited in the claim language, and should therefore be rejected.

In addition to the claim language and specification, Defendants’ proposals are also supported by extrinsic evidence, which defines “application” depending on the context in which the term is used, namely: (1) use, role, or task, or (2) a software program designed to assist in the performance of a specific task. *See, e.g.*, Ex. 29, THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 89 (3d ed. 1996) (“The act of putting something to a special use or purpose ... A specific use to which something is put ... Of or being a computer program designed for a specific task or use”); Ex. 41, CHAMBERS DICTIONARY OF SCIENCE AND TECHNOLOGY 57 (1999) (“The use of a computer to carry out a specific task, eg [sic] word processing. The term is sometimes used to refer to the software involved in the computer application.”).

Finally, SMTs’ proposal additionally fails because it also injects additional ambiguity and breadth not contemplated by the plain and ordinary meaning of the term in the context of a “software program.” First, the language “or group of programs” and “or set of tasks” adds additional breadth not contemplated by the term or the intrinsic record. Second, this language is inconsistent with the ordinary meaning of the term as it provides no instruction how to determine what the “group” is, and could apply to multiple “tasks,” thereby operating to read the term “application” as indistinct from all “programs” on an entire device. Third, the phrase “enables a user to interact with the device to cause the device to” do something finds no basis in the ordinary

meaning of the term or the intrinsic record. Indeed, not all software programs require user interaction. SMT’s proposal should be rejected, and Defendants’ plain and ordinary meaning that is consistent with the claims and specification should be adopted.

K. “wherein a private network includes a wireless local area network (WLAN) for use in a home or office” (501 (18); 739 (18))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	Plain meaning.

The ’501 and ’739 patents include the dependents claims reciting “wherein a private network includes a wireless local area network (WLAN) for use in a home or office.” But this makes no sense, because the recited “private network” bears no discernable relationship to the rest of the claim. The related independent claims recite “one or more networks” and “at least one public network,” but they do they do not mention any “private network.” See ’501 patent, claim 1; ’739 patent, claim 1. By adding this term, the dependent claims recite a new limitation for what some unknown “private network” includes, even though the claims never recite a “private network” in the first place. A POSITA would not be reasonably certain what this “private network” is or how it relates to the features that are claimed. Bims Decl. ¶¶ 38-39.

L. “the prioritization includes data based on GPS or wireless local area network (WLAN)” (937 (18))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	Plain meaning.

This term appears in dependent claim 18 of the ’937 patent. The related independent claim recites a memory that “stores prioritization data” related to connecting to a plurality of wireless networks. ’937 patent, claim 1. Dependent claim 18 then states that “*the prioritization* includes data based on GPS or wireless local area network (WLAN),” but it is not reasonably certain what

this means.¹³ *Id.*, claim 18. Neither the claim nor specification provide any context for what it means for prioritization data to be “based on” GPS or a WLAN. The specification does not use the words “priority” or “prioritization” at all, so it is unclear where (if anywhere) the specification discusses this concept. To the extent SMT argues the “prioritization data” is akin to a ranking of which networks to prioritize over others, the specification provides no context for understanding for what it would mean for that “prioritization data” (i.e., a ranking of which networks to prioritize) to be “based on” GPS or “based on” a WLAN. Bims Decl. ¶¶ 40-41.

M. “A mobile device communication system . . .” (119 (20))

Defendants’ Proposed Construction	SMT’s Proposed Construction
The preamble is limiting. The server is part of the claimed mobile device communication system.	Plain meaning, with the exception of “mobile device” and “server,” which should be construed as proposed by Smart Mobile, and “the server enables conversion of the mobile device from a first function to a second function by providing a plurality of functions to the mobile device,” which should be construed as “the server enables conversion of the mobile device from a first capability to a second capability / plurality of wireless device capabilities.”

Claim 20 of the ’119 patent is directed to a “mobile device communication *system*.” Like other patents in this family, this “system” includes both a mobile device and a server. ’119 patent, claim 20. But to further its litigation strategy, SMT disregards the server, leveraging an ambiguity in the claim language to allege it is infringed by a mobile device alone. The ambiguity is that claim 20 skips over introducing the “server” in the claim and, instead, jumps directly to mentioning the “server” for the first time in other claim limitations—i.e., protocols that “facilitate communication between *a server* and the mobile device.” *Id.* After introducing the server in this way, the claim then recites specific requirements for what the server must do. ’119 patent, claim

¹³ As an initial matter, “the prioritization” in claim 18 has no antecedent basis. Claim 1 recites “prioritization data” not a “prioritization.” ’937 patent, claim 1.

20. SMT seizes on this to argue the claim covers a mobile device alone, even though the claim recites specific requirements for what the server must do as part of the overall system.

A preamble may be limiting (1) where “it recites essential structure or steps,” (2) where it “is essential to understand limitations or terms in the claim body,” or (3) where it “recit[es] additional structure or steps underscored as important by the specification,” *Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1236 (Fed. Cir. 2017). Here, the claim’s preamble meets multiple of these requirements and should be construed as limiting.

First, “mobile device communication *system*” recites essential structure and is essential to understanding limitations in the body, which recites a mobile device and a server that work together a system. For example, the claim recites that the server connects to a network so it can “provide[] functions to the mobile device,” which “enables conversion of the mobile device from a first function to a second function.” ’119 patent, claim 20. The recited “server” plays an essential role in the system that cannot be ignored because it enables the mobile device to convert from one function to another—which goes to the very core of the alleged invention. Bims Decl. ¶¶ 24-25, 42-47. The Court should construe the preamble as limiting because the invention is a system of a mobile device and a server working together. *See Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) (construing “optical waveguide” preamble as limiting because it was what the inventors actually invented, and without construing it as limiting the structure recited in the body of the claim was not otherwise limited to a “waveguide”).

Second, and relatedly, the preamble recites structure the specification underscores as important. Neither the overall system nor the mobile device (as claimed) would even work without the server. For example, the “Summary of the Invention” states that the “present invention” provides a “wireless communication and control *system*” and then describes that system as

including both a “central server” and a “wireless device.” ’119 patent, 1:51-57. It describes the server’s critical role in the system, communicating protocols to the wireless device “to configure the system as one of an arbitrary number of intelligent appliance controllers” or “as one of a selection of Internet terminals.” *Id.*, 1:57-62. Likewise, the specification later describes the “present invention” as a system featuring a “dynamically configurable device utilizing the power of the Internet *and a central server.*” *Id.*, 3:24-26. It repeatedly describes the server as providing a critical function in the claimed system by reconfiguring the wireless device to work in different environments. *See, e.g., id.*, 2:50-53, 3:66-4:1, 4:13-14. Indeed, claim 20 itself recites that the server is what “enables conversion of the mobile device from a first function to a second function by providing a plurality of functions to the mobile device.” *Id.*, claim 20.

N. “the wireless device transmitter and receiver are independently tunable to one or more frequencies” (168 (2))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	The transmitter and receiver of the handheld communication device each may be tuned to one or more frequencies.

Claim 2 recites wherein “the wireless device transmitter and receiver are independently tunable to one or more frequencies.” Because a POSITA would not be reasonably certain of the scope of this limitation, the claim is indefinite. *See Bims Decl.* ¶¶ 48-50.

First, “independently tunable” is not a term of art. By reciting “independently,” the claim presumably requires that some form of “tuning” must be independent from (i.e., not depend on) something else. However, it is unclear (a) what tuning must be independent or (b) what that tuning must be independent from. There are a few possibilities. As one example, the device’s transmitter could be independent from tuning the device’s receiver, and vice versa. While that is one possible interpretation, neither the claims nor the specification mention a scenario in which the transmitter

and the receiver are (at the same time) tuned to different frequencies. As another possibility, tuning either the device's transmitter *or* receiver, or tuning the device's transmitter *and* receiver (in some undefined collective sense), could be independent of some other, external influence. But, a POSITA has no guidance for identifying what that external influence might be. Tuning any transmitter or receiver must depend on *something*. Indeed, claim 2 itself requires that the tuning is "based on the instructions of internal controller electronics and/or that of the server."

Second, compounding this ambiguity is that the claim presumes the wireless device has only one transmitter and one receiver (by reciting "*the* wireless device transmitter and receiver"). For infringement, SMT identifies two *different pairs* of transmitters/receivers: one pair for Wi-Fi signals and one pair for cellular signals. Thus, yet another potential interpretation (that SMT advances) is that the tuning one pair of transmitters/receivers is independent of tuning another pair of transmitters/receivers. Neither the claims nor specification support this interpretation, however, because they consistently claim/describe only one transmitter/receiver.

The specification does not clarify what this term means. The word "independent" appears only once and in a manner that merely parrots the claim language: "The Transmitter and Receiver are independently tunable to one or more frequencies" '168 patent, 6:42-45. The concept of "tuning" appears throughout the specification, but never in a manner that sheds light on what "independently tunable" could mean. *See, e.g., id.*, 2:36-38, 6:12-14.

SMT's construction confirms this term cannot be deciphered. SMT contends the phrase should be construed as "The transmitter and receiver . . . each may be tuned to one or more frequencies." But, this ignores "independently" altogether and reads it out of the claim. Even without the word "independently," the claim already requires that the transmitter and receiver can be tuned. SMT's construction effectively adds nothing more.

O. “one or more primary values and subsidiary values” (168 (2, 4))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	<p>“Primary values:” a set of frequencies associated with a preferred wireless network that is either a public carrier network or a local area network.</p> <p>“Subsidiary values:” a set of frequencies associated with a non-preferred wireless network that is a local area network if the preferred wireless network is a public carrier network or is a public carrier network if the preferred wireless network is a local area network.</p>

Claims 2 and 4 of the ’168 patent tuning to transmit and/or receive frequencies including “one or more primary values and subsidiary values.” Neither the claims nor specification provide any guidance, however, for assessing whether a value is “primary” or “subsidiary.” A POSITA would thus not be reasonably certain of these claims’ scope. *See* Bims Decl. ¶¶ 51-54.

The claims do not provide any helpful context. Aside from reciting that the mobile device can be tuned to these values, the claim does not explain *why* the mobile device is so tuned or what makes a value “primary” vs. “subsidiary.” The claims only add to the confusion by also reciting that the device “dynamically changes” its frequency. What does it mean for the device to be tuned to frequencies including “primary” and “subsidiary” values if the device also “dynamically changes” its frequency? The patent does not explain.

Nor does the specification resolve what it means for a value to be “primary,” “subsidiary,” or something else. The single instance in which the specification uses those terms to describe “values” only parrots the claim language. *See* ’168 patent, 6:12-14 (stating that “Transmit and Receive frequencies may be tuned to one or more primary values and one or more subsidiary values.”).¹⁴ Everywhere else, the specification uses “primary” and either “subsidiary” or

¹⁴ In one additional instance, the specification uses primary and *secondary* (not “subsidiary”) to describe frequencies. *See id.* 5:66-6:4 (“The CT 202 . . . tunes/sets the frequencies within the T/R blocks to primary frequency Fp and secondary frequency Fl.”).

“secondary” to describe *modes*—not values or frequencies. *See id.*, 7:55-58, 3:42-44, 4:11-12, 5:53-56. But these descriptions of modes do not help; they only add to the confusion by suggesting the device can have multiple “primary” modes. *See id.*, Fig. 4 (describing a “current mode” in which the “public carrier loop” is primary and a “requested mode” in which the “local office loop” is primary). By claiming (without explaining) a device that tunes to “primary” and “subsidiary” values, SMT has created an improper “zone of uncertainty” regarding what devices will or will not practice the claim. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (2014).

SMT’s proposal increases the confusion. SMT proposes that “primary” values are associated with a “preferred” wireless network, whereas “subsidiary” values are associated with a “non-preferred network.” But, shifting the terminology to “preferred” and “non-preferred” does not solve the problem. While the specification says the mobile device and server “can decide the preferred mode to be in,” it does not describe what “preferred” means or how to determine whether any particular mode or network is “preferred.” ’168 patent, 4:10-11. The specification also contradicts SMT’s position that the “primary” and “secondary” values are each a “set of frequencies.” The specification consistently describes each device mode as having a *single* frequency. *See id.*, 1:13-15 (“Wireless devices . . . operate at a single set frequency to transmit and receive . . .”), 3:47 (referencing “a set frequency, Fp 208”). The specification does not describe the device having a “set” of frequencies for a single mode or network.

P. “the software is associated with a user and the device stored in a profile” (168 (4))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	The software stored on the server is for a plurality of wireless devices and for a plurality of applications for the plurality of wireless devices, and is associated with information, about a user and the device, that is stored in a profile.

This claim language is indecipherable. *See Bims Decl.* ¶¶ 55-61. First, “the software”

lacks antecedent basis because the claim does not recite any “software” before reciting “the software.” Thus, it is unclear which “software” this term refers to or what relationship it has to the claimed device, rendering this term indefinite. *See, e.g., In re Downing*, 754 F. App’x 988, 996 (Fed. Cir. 2018) (“A claim is indefinite when it contains words or phrases where the meaning is unclear, which may be the result of the lack of an antecedent basis.”).

In addition to the term’s lack of antecedent basis, a POSITA would not be reasonably certain about what must be “stored in a profile.” The garbled phrase “the software is associated with a user and the device stored in a profile” makes no sense. Plainly, a user and a device (physical objects) cannot be stored in a profile. The only other noun in this phrase is software. But, if it was intended to mean the *software* is stored in a profile, it would have been written as “the software is associated with a user and the device *[and is]* stored in a profile.” The patentee did not use that language, and the garbled language it used makes it impossible to know what the phrase means. As between the patentee who had an opportunity to choose its claim language and the public at large, the patentee must bear the cost of its imprecise and indefinite claim language. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (2014) (stating that “the patent drafter is in the best position to resolve the ambiguity in . . . patent claims” (quotations omitted)).

The specification does not resolve this ambiguity. The word “profile” appears in only two conclusory sentences, where all the specification discloses is that a “profile” is apparently a type of “user specific information” that is stored on a server. *See* ’168 patent, 3:57-58 (“A CT/MD 202 can store profiles and *other user specific information* on the Server C 214”); *see also id.*, 7:33-34. The specification discloses nothing further about what a profile actually stores in the context of the invention. While the specification does say that software can be stored on a *server*, *see* ’168 patent, 3:59-61, it says nothing about storing software in a *profile* on a server.

SMT’s proposal attempts to redraft the claim in a way that makes sense, but there is no justification for SMT’s proposed redrafting. The claim recites that the software is associated with “a user and the device,” not with “*information about* a user and the device” as SMT proposes. It cannot be redrafted just to suit SMT’s litigation strategy. *See Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) (stating the Federal Circuit has “repeatedly and consistently has recognized that courts may not redraft claims”). Even if the claim could be rewritten (which it cannot), there is no intrinsic support for rewriting it as SMT proposes. For example, the specification says nothing about a profile storing “information about” a device.”¹⁵ Finally, SMT’s attempt to build numerous other limitations into this claim term should be rejected.

Q. “the remote server stores in memory software for a wireless device” (168 (2)) / “the server is configured to store software for a plurality of wireless devices” (168 (4))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Plain and ordinary meaning, which is: the remote server stores, in memory at the remote server, software on behalf of a wireless device / the server is configured to store software on behalf of a plurality of wireless devices	Plain meaning, which [sic] the exception of “wireless device” ¹⁶ and “server,” which should be construed as proposed by Smart Mobile.

The plain and ordinary meaning of these terms in view of the claim language and intrinsic record requires the remote server to store software “on behalf of” the claimed wireless devices such that the software is linked to a particular wireless device. SMT, however, incorrectly appears to allege that a server that merely stores software that can be sent to any wireless device satisfies the claim. But this is contrary to the record, and, in particular, the invention as a whole.

The plain language of the claims confirm Defendants’ construction is correct. The ’168 patent, claims 2 and 4 recite the following relevant limitations (disputed terms underlined):

¹⁵ SMT’s proposed construction does not clearly identify what must be “stored in a profile,” but it appears to suggest the “information” about a user and the device must be stored in a profile.

¹⁶ Defendants understand SMT to have withdrawn the term “wireless device.”

Claim 2: *a remote server configured to store wireless device software for a plurality of different functions or applications for use by a plurality of wireless devices, wherein the remote server stores in memory software for a wireless device, wherein the remote server sends to the wireless device software, wherein the remote server stores *profiles of user specific information*,*

Claim 4: *wherein the software is associated with a user and the device stored in a profile, wherein the server is configured to store software for a plurality of wireless devices and for a plurality of applications for the plurality of wireless devices,*

'168 patent, claims 2, 4. Different words and phrases within claims are presumed to have a different meaning. *CAE*, 224 F.3d at 1317. The italicized language in claim 2 above confirms the server “store[s] wireless device software . . . for use by a plurality of wireless devices.” Therefore, the additional limitation “the remote server stores in memory software *for a wireless device*” must require *more* than merely storing wireless device software in general that is untethered to any particular device. The language in claim 4 regarding the relationship of the software as “associated with a user and the device” similarly confirms the link between the software stored in the server and the device it is stored on behalf of.

The '168 patent's specification further confirms the tightly linked relationship between a particular wireless device and the software stored on the server. It describes that a cellular telephone (“CT”) that “wishes to be in the primary mode of the local wireless office loop,” but is currently in the mode for the “public carrier wireless loop,” and then changes modes by sending a “request for reconfiguration” to a server. '168 patent, 5:42-61. The server “looks up the functional instruction set 218 and maps the instruction set for transmission to the CT,” which “processes” and “loads” the instruction set into the CT's memory, and the CT is thereby “converted to the primary local office mode 230.” *Id.*, 5:64-6:5. The wireless device therefore relies on the server to store the necessary software on its behalf that the device needs to change modes.

During prosecution, the patentee also identified the below disclosures in the '168 patent's specification as support for the disputed claim language:

When CT/MD 202 wishes to use the services of Server C 214, the Server C 214 works to efficiently deliver the content or perform functions requested by CT/MD 202.

CT/MD 202 utilizes the profiles and other user specific information 218 stored on the Server C 214.

Server C 214 is used to *keep* the various “functional instruction set” and software 218 for use by CT/MD 202. This FIS and software 218 resident on Server C 214 will *serve as the primary repository/exchange to deliver various mode reconfiguration requests to the CT/MD 202*. For example, the CT/MD 202 may send a request to the Server C 214 to be configured as a cell phone because it is not in the home environment 260.

Id., 7:30-43; *see also* Ex. 26, ’168 FH at SM0005187. Accordingly, the device relies on the server to store functional instruction sets on its behalf to change modes; with no link to the software stored on the server, the device would not be able to change modes for different environments. Defendants’ plain and ordinary meaning position is therefore correct.

R. “wherein responsive to a request from the one or more wireless device to a website or URL associated with a website server or a network environment, the one or more wireless device receives an indicator of a software application to be downloaded from the remote server” (168 (19))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	Plain meaning, with the exception of “wireless device,” “server,” and “application,” which should be construed as proposed by Smart Mobile.

This term appears in a dependent claim reciting that “the one or more wireless device” makes a request and receives an indicator of a software application to download. It is indefinite because there is no reasonable certainty which “one or more wireless device” it applies to. *See* Bims Decl. ¶¶ 62-65. Use of “the” means the limitation that follows (“the one or more . . .”) refers to the same limitation (“one or more . . .”) introduced earlier in the claim. But where a claim uses “the” in an ambiguous way, such that it is not reasonably certain which earlier claim limitation it references, the claim is indefinite. *See, e.g., Traxcell Techs., LLC v. Huawei Techs. USA Inc.*, No.

2:17-CV-00042-RWS-RSP, 2019 WL 121966, at *14 (E.D. Tex. Jan. 7, 2019) (holding “at least one said wireless device” indefinite as unclear which device(s) it referred to where claim also recited “said wireless device,” “said at least one wireless device,” and “at least one of said at least two wireless devices.”).¹⁷

Here, neither the dependent claim at issue, nor its related the independent claim, previously recites “one or more wireless device.” ’168 patent, claim 2, 19. The independent claim recites two possibilities, but neither of them applies. First, it recites a remote server that stores software “for use by *a plurality of wireless devices.*” *Id.* The term “plurality” means two or more,¹⁸ so this limitation requires a remote server to store software for two or more wireless devices. Second, the independent claim separately recites that the remote server stores software for “*a wireless device.*” *Id.* In the limitations that follow, it makes clear that this “a wireless device” refers to a singular, specific wireless device, because it goes on to recite multiple limitations directed to what “*the wireless device*” (i.e., the singular, specific wireless device) must include. *Id.* (e.g., reciting that “the wireless device” is enabled for voice and data communication and that “the wireless device” is configured to transmit and receive at a plurality of frequencies).

In the context of this claim language “the one or more wireless devices” is indefinite. It cannot refer to the previously-recited plurality of (i.e., two or more) wireless devices, because “one or more” is distinct from “two or more.” Nor can it refer to the previously-recited “a wireless device,” because that limitation is focused on a singular, specific wireless device. A POSITA

¹⁷ See also Manual of Patent Examining Procedure 2173.05(e) (“[I]f two different levers are recited earlier in the claim, the recitation of “said lever” in the same or subsequent claim would be unclear where it is uncertain which of the two levers was intended.”)

¹⁸ See *Dayco Products, Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1327-28 (Fed. Cir. 2001) (“In accordance with standard dictionary definitions, we have held that ‘plurality,’ when used in a claim, refers to two or more items, absent some indication to the contrary.”).

would not know with reasonable certainty which “one or more wireless devices” the limitations of this dependent claim apply to. Accordingly, it is indefinite.

S. “more precise location” (168 (21))

Defendants’ Proposed Construction	SMT’s Proposed Construction
Indefinite	Plain meaning.

Claim 21 of the ’168 patent recites the “system of claim 2, wherein the device determines a more precise location using both GPS location and a network box location.” This term is indefinite for at least two reasons. First, because claim 2 does not recite any “location” to begin with, it is unclear what “more precise location” claim 21 requires (i.e., more precise compared to what other location?). A POSITA has no way of knowing. Second, the specification discloses that the device can already determine its “*exact* location” using GPS alone. ’168 patent, 4:4-6. Given that, it is unclear what it could possibly mean for the device to determine a “more precise location” using both GPS and a network box location. If the device already determines its “exact” location using GPS, how could using a “network box location” make that already-*exact* location more precise? *See In re Walter*, 698 Fed. Appx. 1022, 1026 (Fed. Cir. 2017) (holding indefinite a “term of degree without any accompanying guidance in the intrinsic record for determining its scope”). The specification does not explain, and it would not otherwise be reasonably certain to a POSITA. Accordingly, this claim term is indefinite. *See Bims Decl.* ¶¶ 66-68.

V. CONCLUSION

For at least the foregoing reasons, Defendants respectfully request the Court construe the disputed terms as proposed by Defendants.

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Respectfully Submitted

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CERTIFICATE OF SERVICE

I hereby certify that all counsel of record who have consented to electronic service are being served with a copy of this document via the Court's CM/ECF on June 8, 2022. Any other counsel of record will be served by e-mail on this same date.

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